

ACKNOWLEDGEMENT

The authors are indebted to Dr. H. N. Moldenke of U.S.A. for critically going through the notes and herbarium specimens sent to him. They are also thankful to the authorities of the Botanical Survey of India, Southern, Western and Central herbaria, for lending specimens of *E. ritchieanum* for comparison.

BOTANY DEPARTMENT,
SHIVAJI UNIVERSITY,
KOLHAPUR,
May 5, 1971.

A. R. KULKARNI
M. H. DESAI

REFERENCES

- FISCHER, C. E. C. (1928): Eriocaulaceae in Flora of the Presidency of Madras. III: Reprinted by Botanical Survey of India, Calcutta.
 FYSON, P. F. (1919): Indian species of *Eriocaulon*. *Journ. Indian Bot. Soc.* 1: 49-53.
 FYSON, P. F. (1921): Indian species of *Eriocaulon*. *ibid.* 2: 307-320.
 KULKARNI, A. R. & DESAI, M. H. (1970): Tubers in *Eriocaulon ritchieanum* Ruhl. *J. Bombay nat. Hist. Soc.* 67: 134-135.

32. DISTRIBUTION OF *GELIDIELLA ACEROSA* (FORSKÅL) FELDMANN & HAMEL

(With a map)

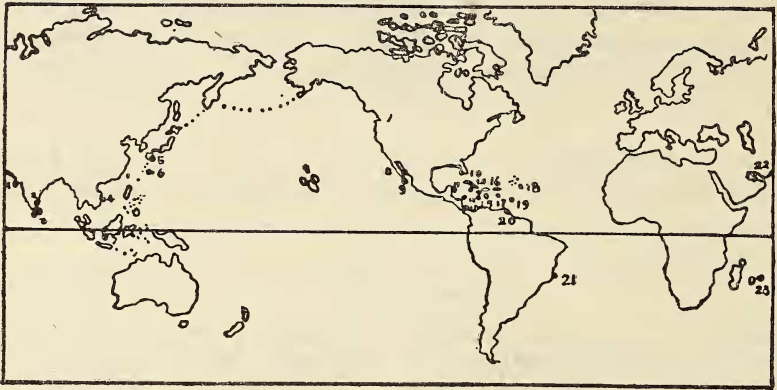
Among the four species of *Gelidiella* reported from Indian coasts, *G. myrioclada* Boerges and *Gelidiella* sp. are endemic, and *Gelidiella bornetii* is limited in distribution to India and Kei islands. Hence, *Gelidiella acerosa* (Forskål) Feldmann et Hamel, which is a widely distributed species, is considered here to understand its distributional pattern in the world.

During the monographic treatment of *Gelidiella acerosa*, available along the west coast of India and south-east coast of Madras, the author had an opportunity to study the various available species of this genus in the world deposited in the herbarium collections maintained at Madras University, Madras. Based on the study of these herbarium specimens, an attempt is made to know the extent to which the distribution of *Gelidiella acerosa* agrees with the previously recognised marine algal provinces (Fritsch 1945; Silva 1957).

It can be seen from the map that this alga spans the equator and is represented in the three oceans—Indian, Pacific and Atlantic.

In the Indian ocean, its north-western limit is in the Red sea and Iranian Gulf (Boergesen 1939), while in the west it has been reported only from Mauritius (Boergesen 1950). In the north, it occurs along the

northern part of the Arabian sea and in the south in Ceylon and south India.



In the Pacific Ocean, its occurrence in the southern part of Kyushu (Japan) is noteworthy. Okamura (1926) states that a considerable number of seaweeds present along the southern shores of the Japanese islands belong to the Indo-Pacific region, while, comparatively few appear to occur on the American Pacific shores. However, *G. acerosa* is known also from the Gulf of California (Dawson 1944). It is interesting to note its absence in the Australian flora with which the Indian flora has been shown to have considerable similarity (Boergesen 1934).

In the Atlantic ocean it is well represented in the western tropical Atlantic coasts, while it is absent from the west African coasts on the eastern part of the Atlantic. Boergesen (1915-20) has shown that several seaweeds known from Indo-Pacific region and West Indies are generally absent from the southern extremities of Africa and America.

The distribution of *Gelidiella acerosa* in the Indian and Pacific ocean supports the occurrence of Indo-Pacific algal province, whose existence has been recognised by many workers.

On the basis of the distribution of the tropical marine algae in the Indo-Pacific region and West Indies, it was considered that these migrated to the Atlantic (Fritsch 1945). As our knowledge of distribution of marine algae is limited, it is difficult to know the original home of any particular species. However, on the basis of the distributional pattern of *Gelidiella acerosa* it appears that this alga was originally from the Atlantic.

ACKNOWLEDGEMENTS

The author is thankful to Dr. C. S. Prakasa Rao of Banaras Hindu University, Varanasi, for the guidance provided during the course of the

present study and to Dr. D. S. Datar of Central Salt & Marine Chemicals Research Institute, Bhavnagar, for the facilities provided. Thanks also are due to Prof. T. V. Desikachary for the kind permission accorded to the author to study the herbaria at Madras University.

CENTRAL SALT AND MARINE CHEMICALS P. SREENIVASA RAO
RESEARCH INSTITUTE,
BHAVNAGAR,
April 12, 1971.

REFERENCES

- BOERGESEN, F. (1915-20): The marine algae of the Danish West Indies 2. Rhodophyceae. *Dansk. Bot. Arkiv.* 3: 1-504.
- (1934): Some marine algae from the northern part of the Arabian sea with remarks on their geographical distribution. *Det. Kgl. Danske Videnskav Selsk. Biol. Medd.* 11: 1-72.
- (1950): Some marine algae from Maurities additions to the parts previously published II. *ibid.* 18 (11): 1-45.
- DAWSON, E. Y. (1944): The marine algae of the gulf of California. *Allan Hancock Pacific Exp.* 3 (10): 189-452.
- FRICTH, F. E. (1945): The structure and reproduction of the algae, vol. 2. Univ. Press. Cambridge. pp. XIV + 939.
- OKAMURA, K. (1926): On the distribution of marine algae in Japan. *Proc. Third Pan. Pacific Sci. Cong.* 1: 958-963.
- SILVA, P. C. (1957): Comparison of algal floristic patterns in the Pacific with those in the Atlantic and Indian oceans, with special reference to *Codium*. *Proc. 9th Pacific Sci. Cong. Bangkok, 1957*, 4: 201-216.

33. RECORD OF *DRAPARNALDIA ACUTA* KUTZ. FROM GUJARAT

(With a text-figure)

The only record of *Draparnaldia* from India is that of Randhawa (1936). He reported *D. plumosa* from 'N. India'. Srinivasan (1965) has made no mention of the genus in his work. During the course of investigation of algal flora of the region *Draparnaldia acuta* Kutz. has been reported from Ahmedabad and for the first time from the country. The alga is briefly described below. The description conforms with that given by Prescott (1951).

Main axis of the thallus bearing horizontal whorled fascicles of branchlets which are ovate to acuminate in outline; cells of the main axis and branchlets are slightly swollen, 34-36 μ in diameter; cells of the branchlets 8 μ in diameter. Chloroplast $\frac{1}{2}$ the length of the cells.

Found in the swamp behind the University, Ahmedabad, on 16th July, 1970.